

REMARKS/ARGUMENTS

Applicant has amended Claims 1, 17, 41, and 45. Claims 1, 4-17, 19-21, 23, and 41-53 are pending. Applicant respectfully requests reconsideration of the pending claims in view of the following remarks.

Independent Claim 1

Claim 1 stands rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent No. 6,292,695 issued to Webster, Jr. et al. (hereinafter “Webster”). Claim 1 also stands rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 4,351,330 issued to Scarberry (hereinafter “Scarberry”).

Claim 1 specifies “said proximal region having an electrical connecting means for applying an electric pulse to the expandable electrode in order to achieve controlled intermittent asystole.”

Webster discloses a method of controlling cardiac fibrillation, tachycardia, or cardiac arrhythmia by the use of an electrophysiology catheter. *Webster*, Abstract. Webster discloses that the electrophysiology catheter includes “at least one electrode and preferably an electrode array, e.g., an expandable electrode basket, at its distal end.” *Id.* at col. 2, lines 53-56. Webster also discloses that the catheter is inserted into a blood vessel and directed to a location adjacent to a cardiac parasympathetic or sympathetic nerve. *Id.* at col. 2, lines 56-59. Webster further discloses that a pulsed electrical signal is delivered through the electrodes to slow or regulate the beating of the heart, and that the stimulus is “maintained for an extended period to provide a physician sufficient time to administer a drug, operate or take other appropriate measures to attempt to permanently or at least more permanently establish normal heart rhythm or slow the heart rate.” However, Webster discloses that “such a period may require several hours.” *Id.* at col. 2, lines 59-66. Accordingly, Webster does not disclose “applying an electric pulse to the expandable electrode in order to achieve controlled intermittent asystole,” as specified by amended Claim 1.

Scarberry discloses an emergency resuscitation and defibrillation apparatus with an endotracheal tube having an expandable cuff. *Scarberry*, Abstract. The expanded electrode cuff 56 includes an inflation piece 52 that urges electrode areas 58 against the wall tissue of the esophagus 17. This establishes an internal current path between electrode areas 58 and electrodes 48, 33, or 31 in order to “defibrillate a patient while maintaining artificial respiration.” *Id.* at col. 5, lines 21-27. Accordingly, Scarberry only discloses an expandable cuff used to defibrillate a patient during an emergency, not an expandable electrode used “to achieve controlled intermittent asystole,” as specified by amended Claim 1.

Thus, neither Webster nor Scarberry discloses “said distal region having at least one expandable electrode and an electrode expanding means, the expandable electrode being longitudinally arranged,” as specified by Claim 1. Therefore, independent Claim 1 and dependent Claims 4-16 are allowable.

Dependent Claims 5, 6-8, 11, and 13-15

Claims 5, 6-8, 11, and 13-15 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Webster. Claims 5, 6-8, 11, and 13-15 depend from Claim 1, and are therefore allowable for the reasons set forth above with respect to Claim 1. Claims 5, 6-8, 11, and 13-15 specify additional patentable subject matter not specifically discussed herein.

Dependent Claims 7, 9, 10, 12, and 16

Claims 7, 9, 10, 12, and 16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Webster. Claims 7, 9, 10, 12, and 16 depend from Claim 1, and are therefore allowable for the reasons set forth above with respect to Claim 1. Claims 7, 9, 10, 12, and 16 specify additional patentable subject matter not specifically discussed herein.

Independent Claim 17

Claim 17 stands rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,282,468 issued to Klepinski. (hereinafter “Klepinski”).

Claim 17 specifies “a pair of electrically non-conducting members secured together in a pivotal relation so as to form confronting rigid jaws” and “the electrode being shaped to avoid causing crush trauma to the nerve, the electrode including a concave portion that receives the nerve and at least one flat portion.”

Klepinski discloses an electrode system 10 with a central spine 12 and fingers 14a-14n and 16a-16n that extend orthogonal to the central spine 12 and curve away from the central spine 12. *Klepinski*, col. 2, lines 55-65; Figure 1. Electrodes 18 are positioned on the inner surfaces of the fingers and follow the orthogonal curve of the fingers. *Id.* at col. 3, lines 7-10. As noted by the Examiner, the fingers are “molded of a semi-rigid polymer” so that “they can be spread to permit implantation over the nerve and return to the original shape for chronic use.” *Id.* at col. 3, lines 2-4. As a result, the fingers of Klepinski are not “confronting rigid jaws,” as specified by amended Claim 17. In addition, the fingers of Klepinski do not include “a concave portion that receives the nerve and at least one flat portion,” as also specified by Claim 17.

Accordingly, Klepinski does not disclose “a pair of electrically non-conducting members secured together in a pivotal relation so as to form confronting jaws” and “the electrode being shaped to avoid causing crush trauma to the nerve, the electrode including a concave portion that receives the nerve and at least one flat portion,” as specified by Claim 17. Thus, independent Claim 17 and dependent Claims 19-20 are allowable.

Dependent Claims 19-20

Claim 19 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Klepinski. Dependent Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Klepinski in view of United States Patent No. 6,123,718 issued to Tu et al. (hereinafter “Tu”). Claims 19-20 depend from Claim 17, and are therefore allowable for the reasons set forth above

with respect to Claim 17. Claims 19-20 specify additional patentable subject matter not specifically discussed herein.

Independent Claim 21

Claim 21 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Klepinski.

Claim 21 specifies “the electrode being positioned in a longitudinal traversing channel of an electrically non-conductive member.”

Klepinski discloses an electrode system 10 with a central spine 12 and fingers 14a-14n and 16a-16n that extend orthogonal (*i.e.*, radially) to the central spine 12 and curve away from the central spine 12. *Klepinski*, col. 2, lines 55-65; Figure 1. Electrodes 18 are positioned on the inner surfaces of the fingers and follow the orthogonal curve of the fingers. *Klepinski*, col. 3, lines 7-10. Accordingly, the radially-extending fingers of Klepinski do not include electrodes “positioned in a longitudinal traversing channel,” as specified by Claim 21.

Thus, Klepinski does not disclose “the electrode being positioned in a longitudinal traversing channel of an electrically non-conductive member,” as specified by Claim 21. Thus, independent Claim 21 and dependent Claims 22-23 are allowable.

Dependent Claims 22-23

Claim 23 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Klepinski in view of Tu. Applicant is assuming that Claim 22 was intended to be included in the rejection on page 3 of the Office action. Claims 22-23 depend from Claim 21, and are therefore allowable for the reasons set forth above with respect to Claim 21. Claims 22-23 specify additional patentable subject matter not specifically discussed herein.

Independent Claim 41

Claim 41 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Scarberry.

Claim 41 specifies “a nasogastric tube having an inflatable means of expanding an electrode and an electrode attached to said inflatable means so that when the inflatable means is inflated, the electrode contracts the inner surface of the trachea” and “a means of supplying an electric pulse to said electrode in order to achieve controlled intermittent asystole.”

Scarberry discloses an emergency resuscitation and defibrillation apparatus with an endotracheal tube having an expandable cuff. *Scarberry*, Abstract. The expanded electrode cuff 56 includes an inflation piece 52 that urges electrode areas 58 against the wall tissue of the esophagus 17. This establishes an internal current path between electrode areas 58 and electrodes 48, 33, or 31 in order to “defibrillate a patient while maintaining artificial respiration.” *Id.* at col. 5, lines 21-27. Accordingly, Scarberry only discloses an expandable cuff used to defibrillate a patient during an emergency, not an expandable electrode used “to achieve controlled intermittent asystole,” as specified by amended Claim 41.

Accordingly, Scarberry does not disclose “a nasogastric tube having an inflatable means of expanding an electrode and an electrode attached to said inflatable means so that when the inflatable means is inflated, the electrode contracts the inner surface of the trachea” and “a means of supplying an electric pulse to said electrode in order to achieve controlled intermittent asystole,” as specified by amended Claim 41. Thus, independent Claim 41 and dependent Claims 42-44 are allowable.

Dependent Claims 42-44

Claims 42-44 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Scarberry. Claims 42-44 depend from Claim 41, and are therefore allowable for the reasons set forth above with respect to Claim 41. Claims 42-44 specify additional patentable subject matter not specifically discussed herein.

Independent Claim 45

Claim 45 stands rejected under 35 U.S.C. § 102(e) as being anticipated by Webster. Claim 45 also stands rejected under 35 U.S.C. § 102(e) as being anticipated by Tu.

Claim 45 specifies “a nasogastric tube having at least one expandable electrode thereon, so that the electrode contacts a wall of the esophagus when the electrode is expanded” and “wherein the electrode has a means for connection to an electrical pulsing means in order to achieve controlled intermittent asystole.”

As noted above, Webster discloses a method of controlling cardiac fibrillation, tachycardia, or cardiac arrhythmia by the use of an electrophysiology catheter. *Webster*, Abstract. Webster also discloses that the catheter is inserted into a blood vessel and directed to a location adjacent to a cardiac parasympathetic or sympathetic nerve. *Id.* at col. 2, lines 56-59. However, Webster does not disclose “a nasogastric tube having at least one expandable electrode thereon, so that the electrode contacts a wall of the esophagus when the electrode is expanded,” as specified by Claim 45.

Tu discloses “an ablation balloon catheter for treating tissues or atherosclerosis.” *Tu*, Abstract. Tu also discloses that a “surface-conductive balloon catheter of the present invention can be used to deploy balloon-expanded conductive elastomer electrode means in several parts of the anatomy for further ablation therapy, and is not limited solely to the location of coronary arteries.” *Id.* at col. 8, lines 58-62. However, Tu does not disclose “a nasogastric tube having at least one expandable electrode thereon, so that the electrode contacts a wall of the esophagus when the electrode is expanded” or “wherein the electrode has a means for connection to an electrical pulsing means in order to achieve controlled intermittent asystole,” as specified by amended Claim 45.

Accordingly, neither Webster nor Tu discloses “a nasogastric tube having at least one expandable electrode thereon, so that the electrode contacts a wall of the esophagus when the electrode is expanded” and “wherein the electrode has a means for connection to an electrical

pulsing means in order to achieve controlled intermittent asystole," as specified by amended Claim 45. Thus, independent Claim 45 and dependent Claims 46-53 are allowable.

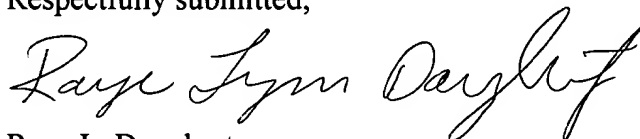
Dependent Claims 46-53

Claims 46-48 and 50-53 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Webster. Claim 49 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Tu. Claims 46-53 depend from Claim 45, and are therefore allowable for the reasons set forth above with respect to Claim 45. Claims 46-53 specify additional patentable subject matter not specifically discussed herein.

CONCLUSION

In light of the above, Applicant respectfully requests reconsideration and allowance of Claims 1, 4-17, 19-21, 23, and 41-53.

Respectfully submitted,



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